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Roila et al.

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(54) **PACKET FOR TOBACCO PRODUCTS**

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B65D 5/38 (2006.01)

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CPC . ***A24F 15/12*** (2013.01); ***B65D 5/38*** (2013.01); ***B65D 85/1009*** (2013.01); ***B65D 85/1036*** (2013.01)

(58) **Field of Classification Search**
CPC A24F 15/12; A24F 15/16; A24F 15/14; A24F 15/00; A24F 15/04; A24F 15/06; B65D 85/10; B65D 85/1009; B65D 85/1036; B65D 85/1045; B65D 85/1054; B65D 5/38
USPC 206/252, 254, 249, 250, 255, 251
See application file for complete search history.

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(74) *Attorney, Agent, or Firm* — Timothy J. Klima; Shuttleworth & Ingersoll, PLC

(57) **ABSTRACT**

A packet for tobacco products, includes a mobile container to receive the tobacco products, and a box-shaped body, housing the mobile container such that the mobile container can slide relative to the box-shaped body between a position in which the mobile container is completely inserted in the box-shaped body and a position in which a part of it is extracted from the box-shaped body. Each mobile container includes an inner container housing a group of tobacco products, and an outer container housing the inner container slidably in parallel with axes of the tobacco products, thus allowing the inner container to slide between a retracted position, and an extracted or raised position, in which the inner container is positioned close to a top wall of the outer container and a portion of a tobacco product is accessible through an opening in the outer container.

17 Claims, 16 Drawing Sheets

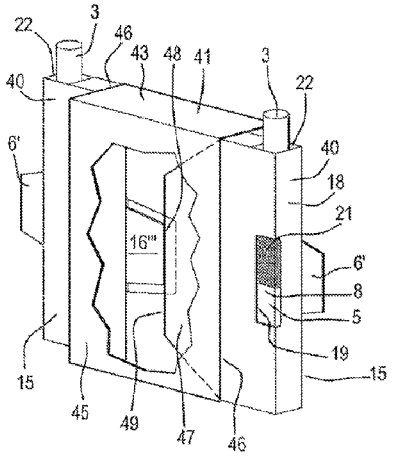

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FIG.1

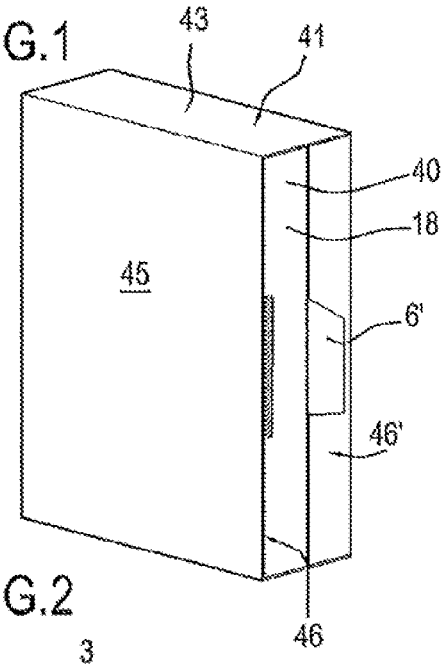


FIG.2

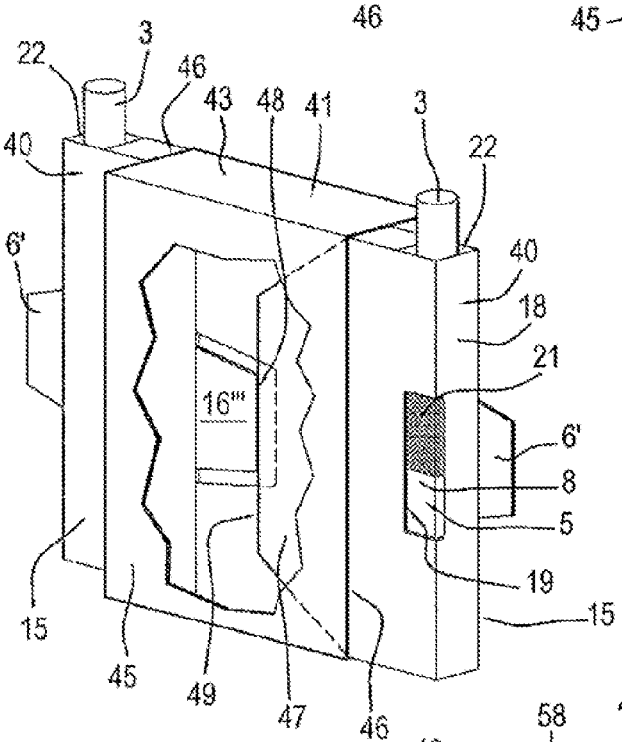


FIG.3

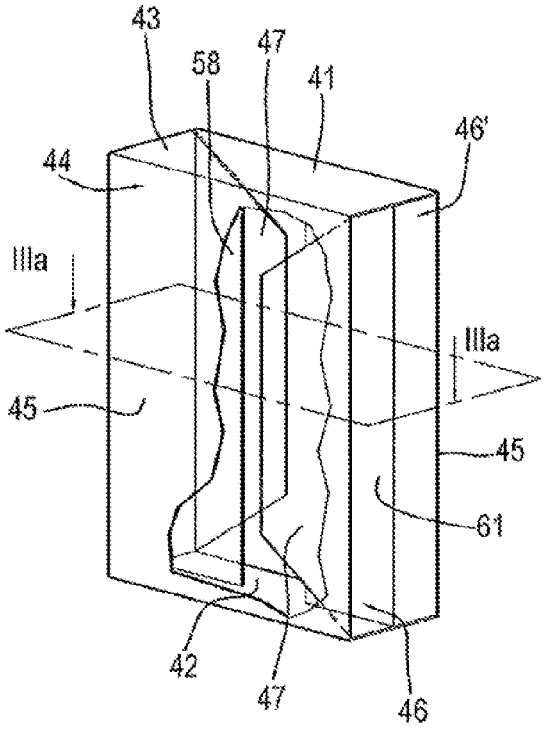


FIG.3a

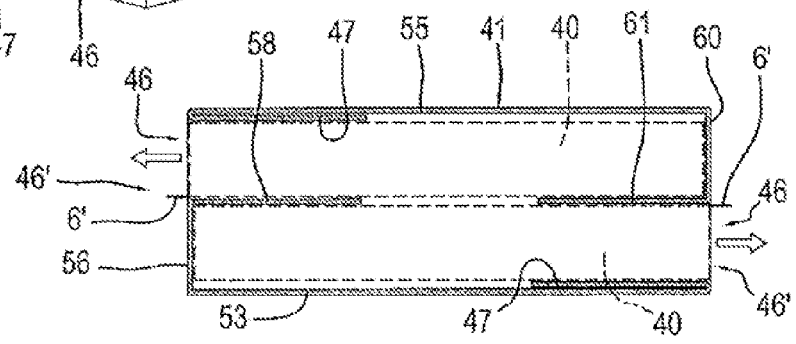


FIG.4

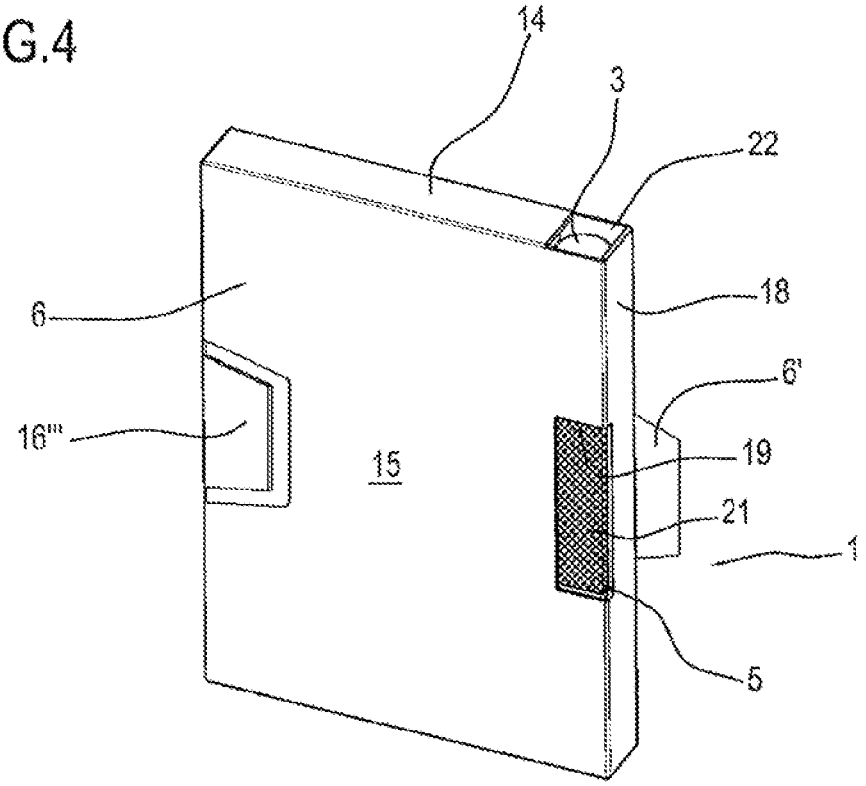


FIG.5

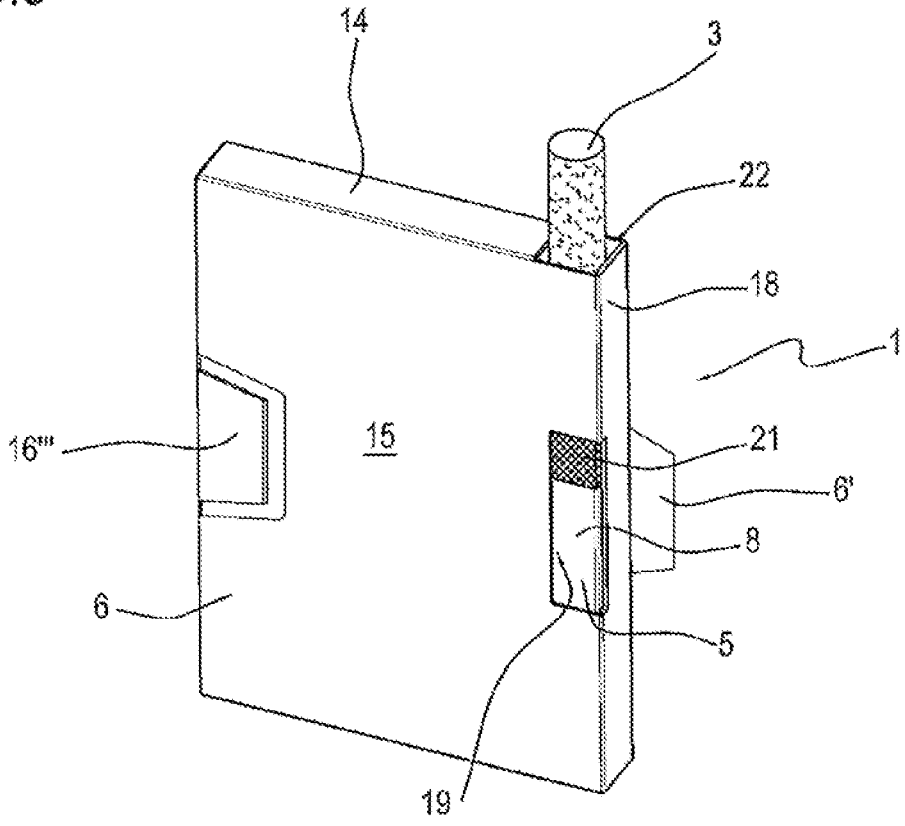


FIG.6

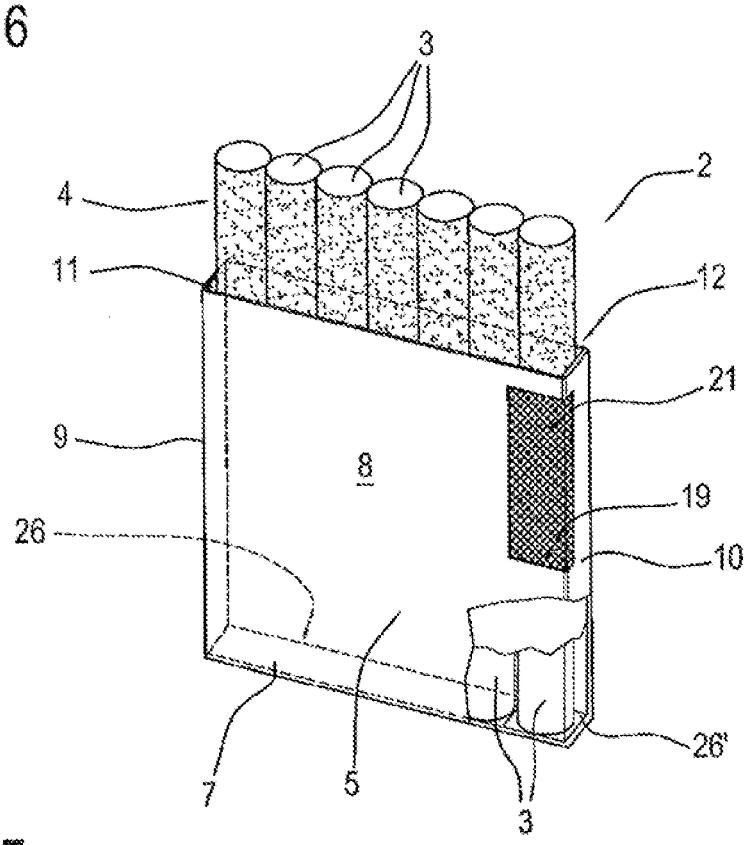


FIG.7

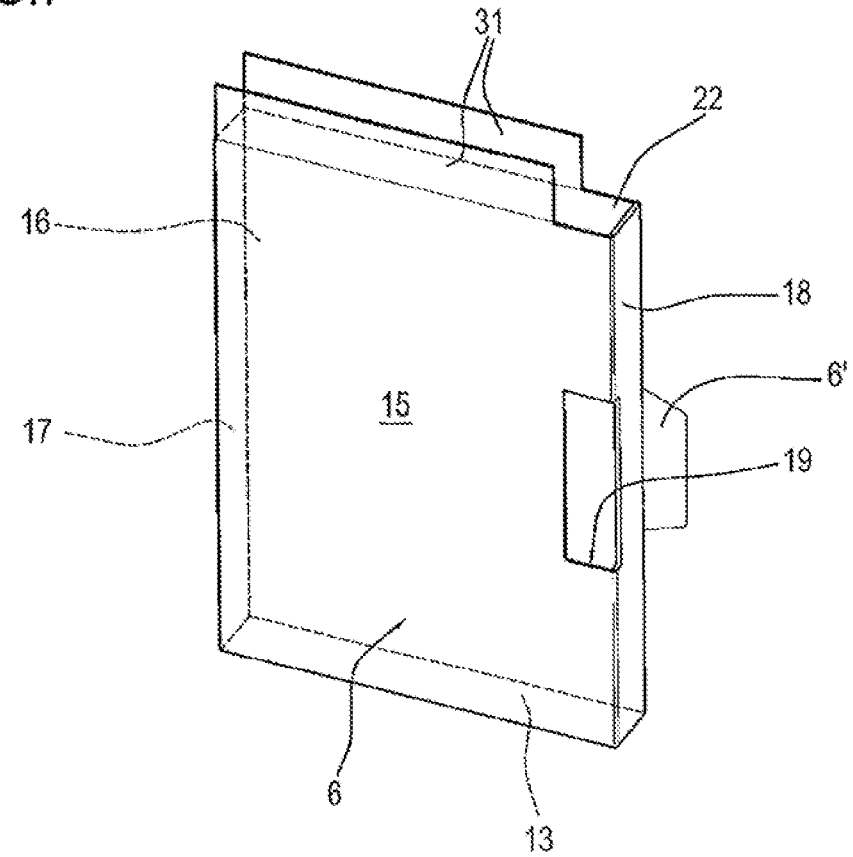


FIG.8

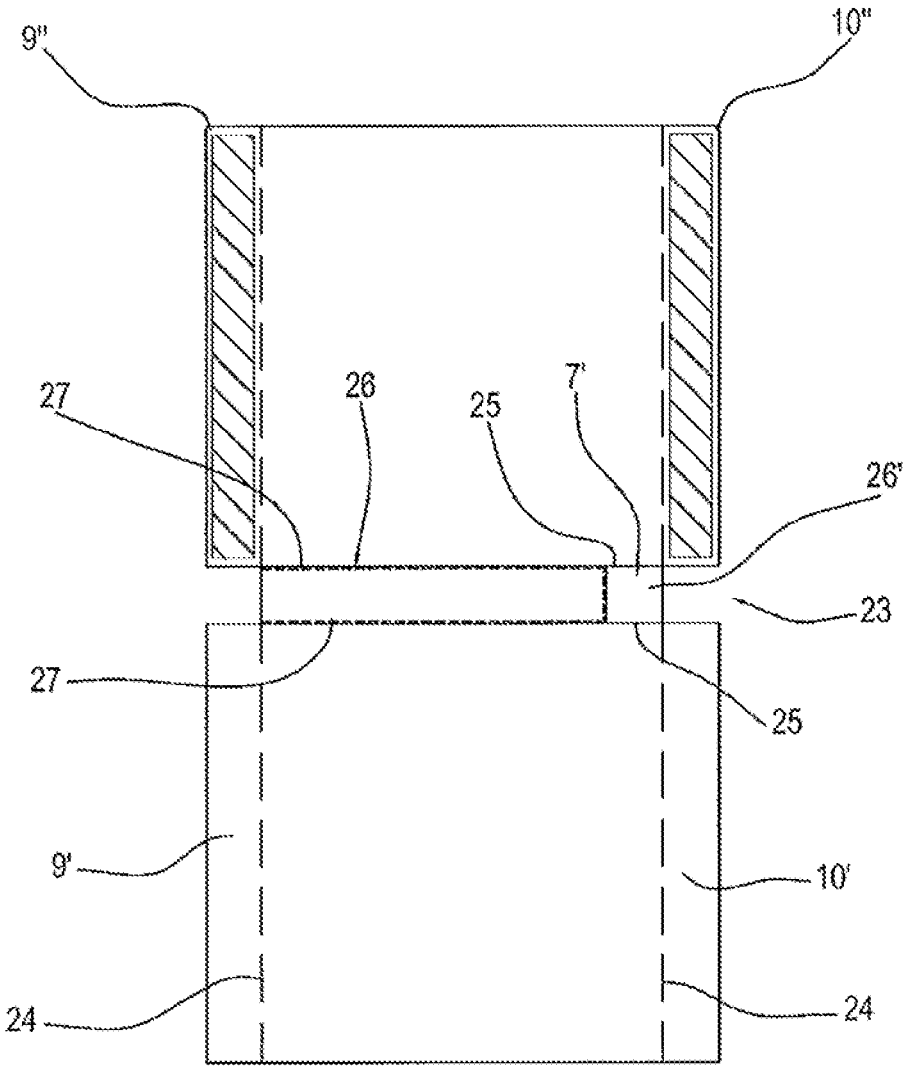


FIG.9

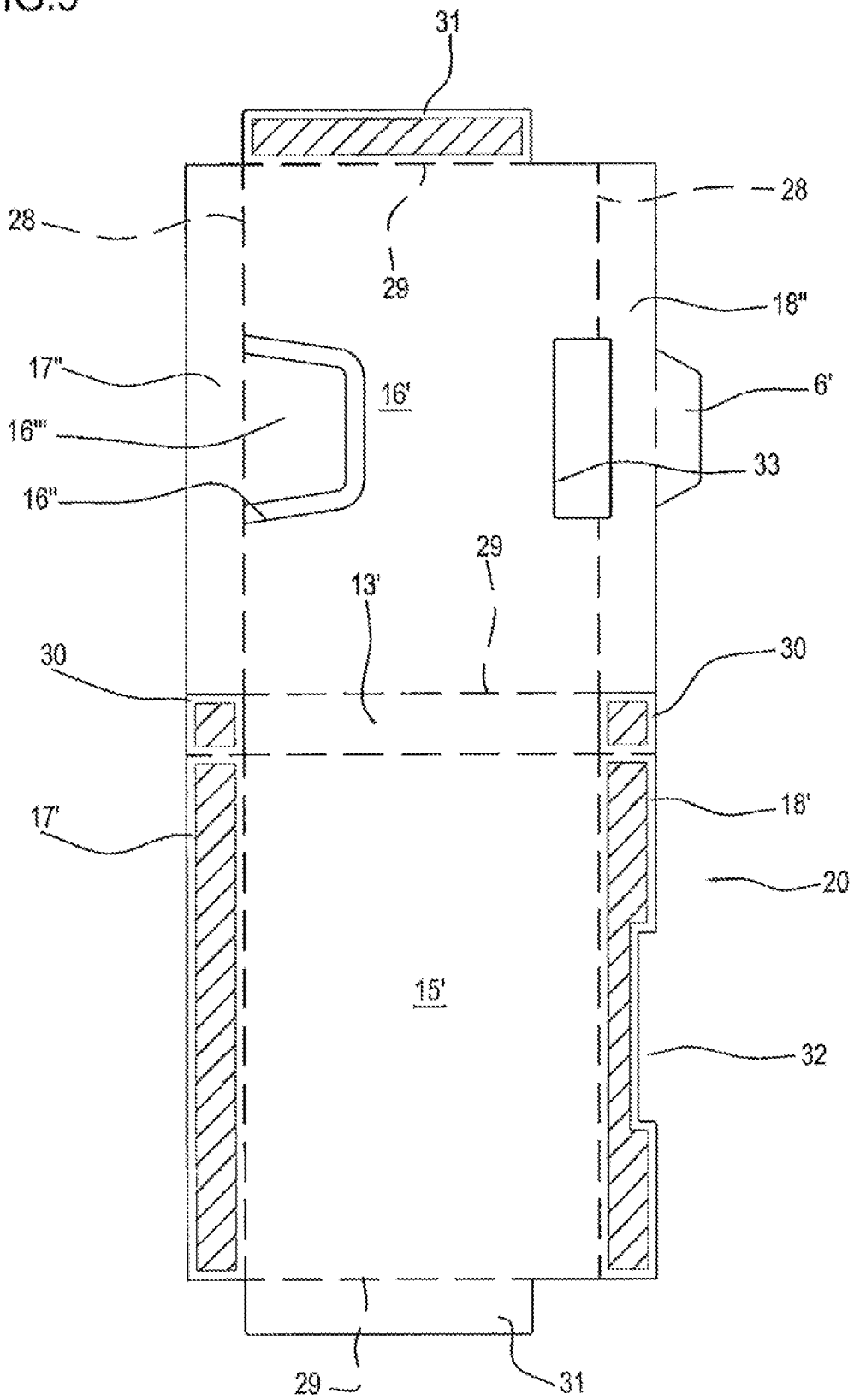


FIG.10

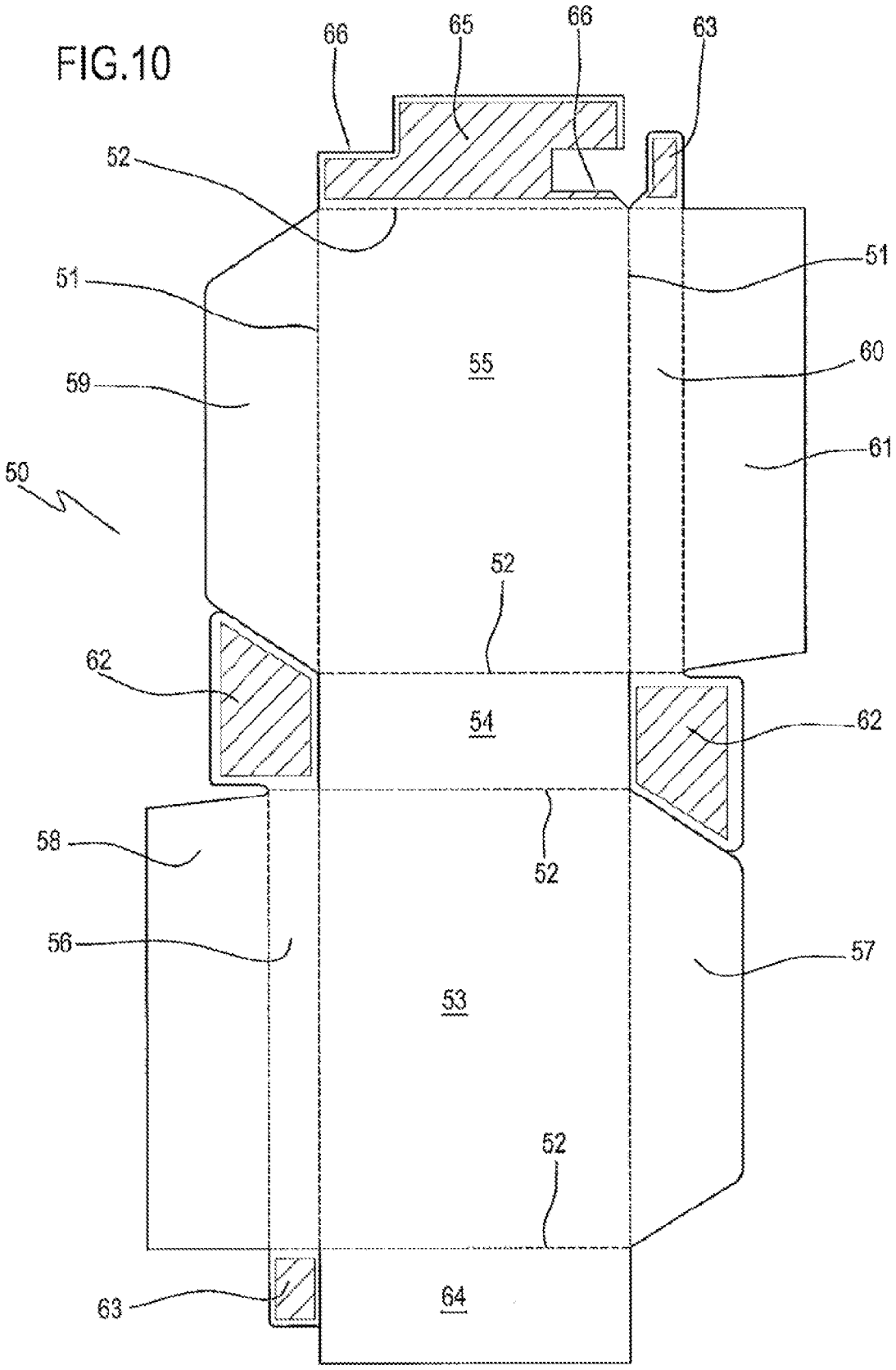


FIG.11

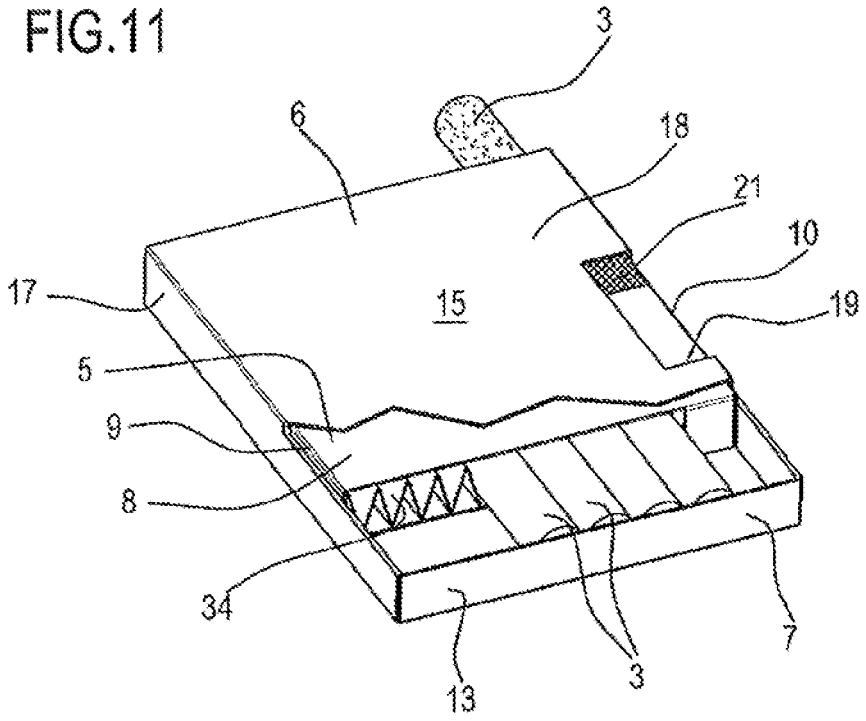


FIG.12

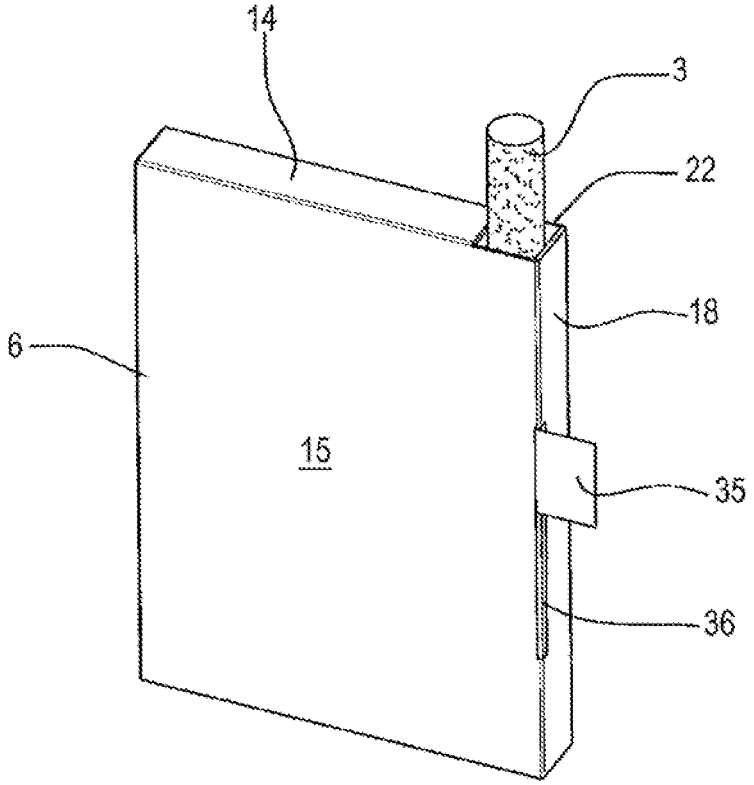


FIG.13

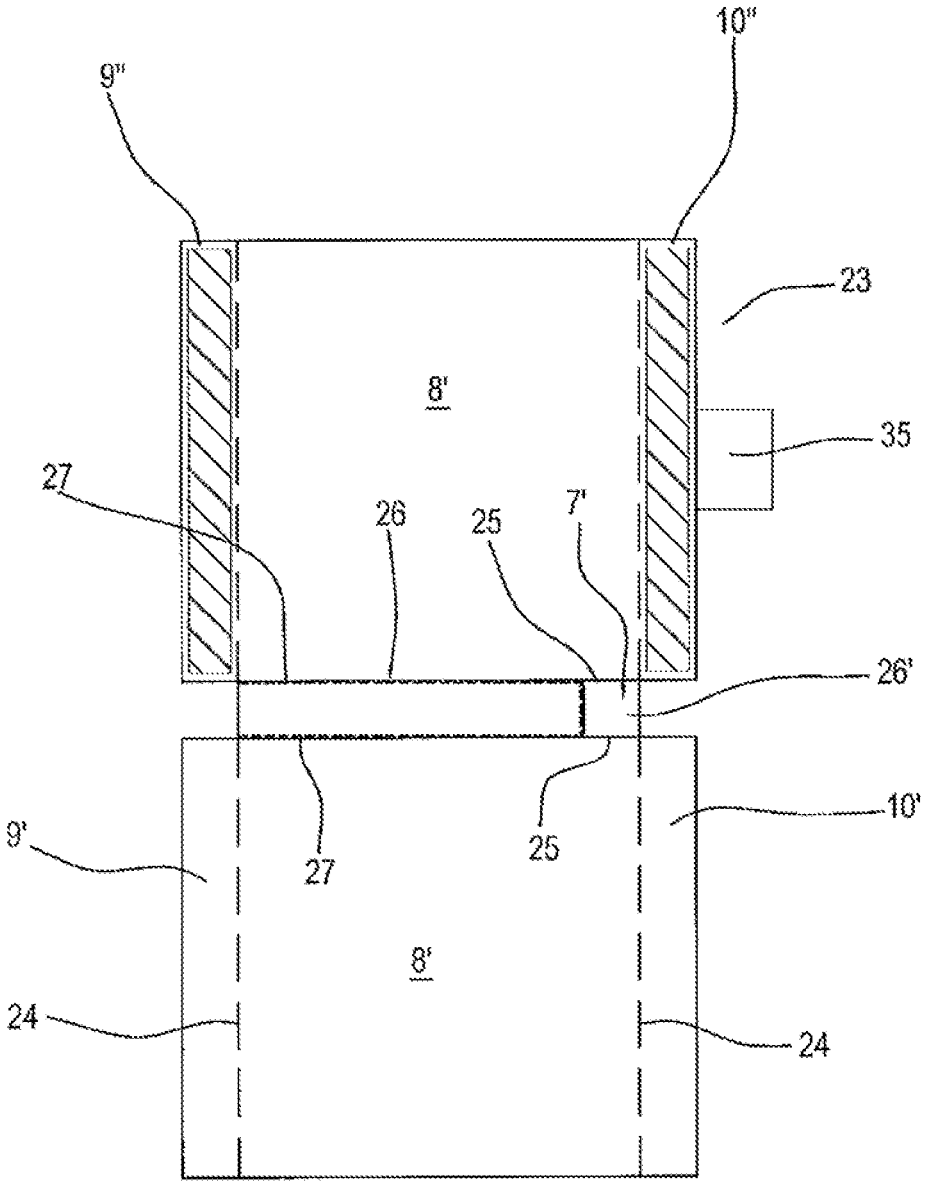


FIG.14

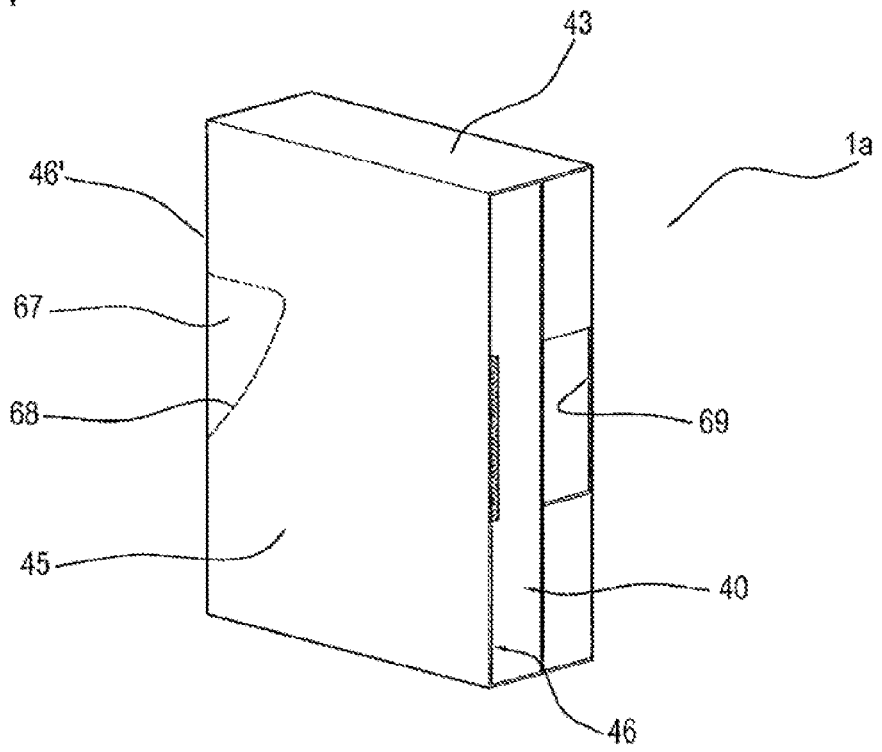

43
1a
46'
67
68
69
45
40
46

FIG.15

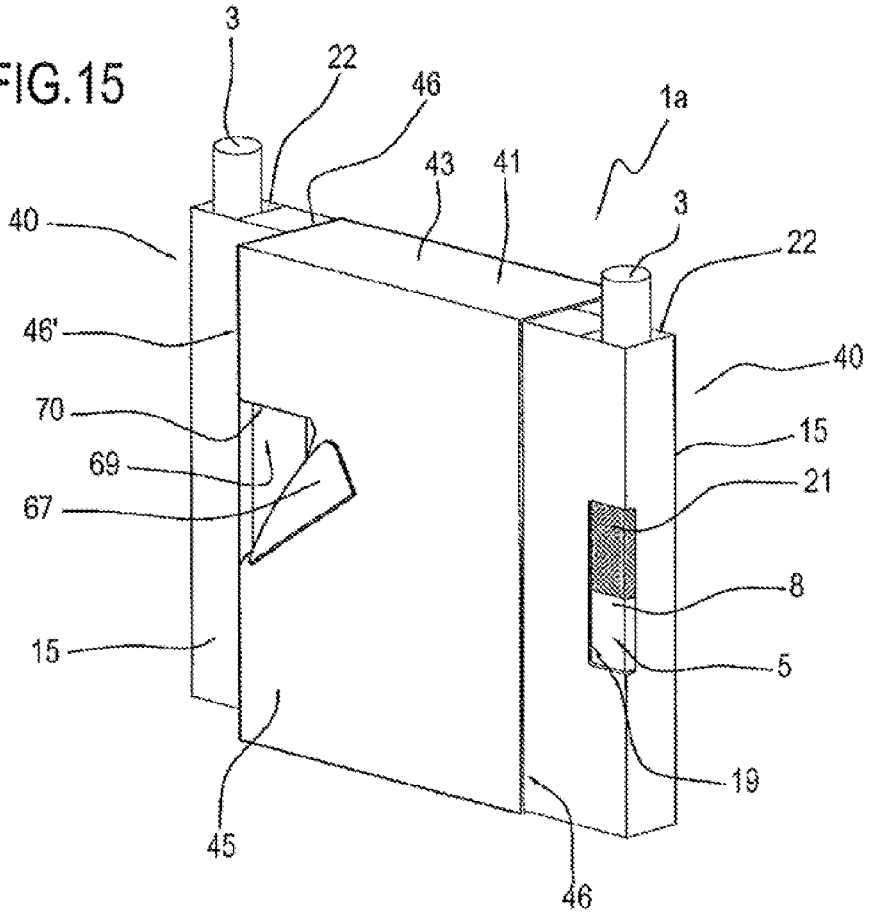

3
22
46
1a
43
41
40
3
22
46'
40
70
15
69
21
67
8
15
5
19
45
46

FIG.16

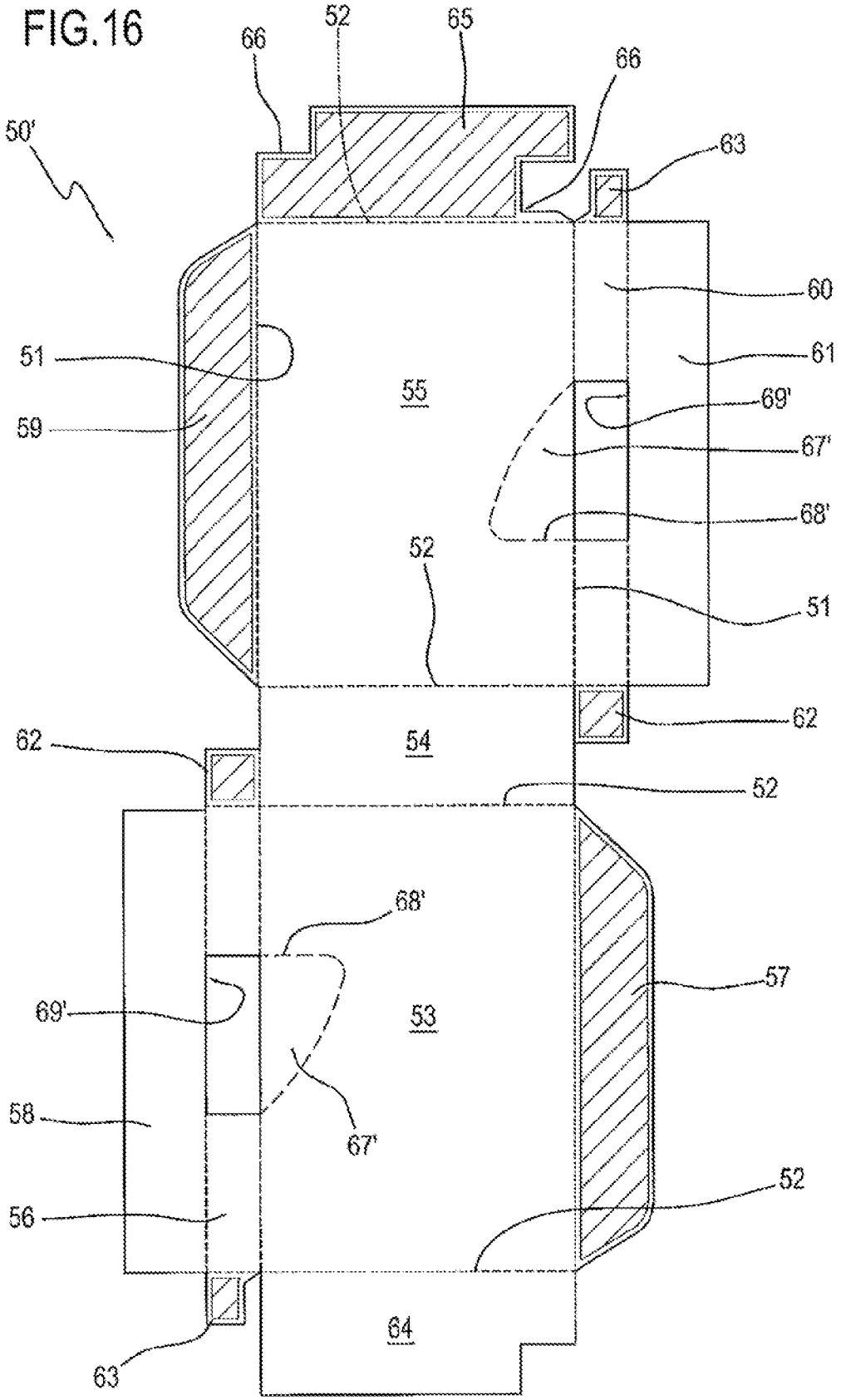

66
52
65
66
50'
63
60
51
61
55
69'
59
67'
68'
52
51
62
62
54
52
68'
57
69'
53
58
67'
52
56
64
63

FIG.17

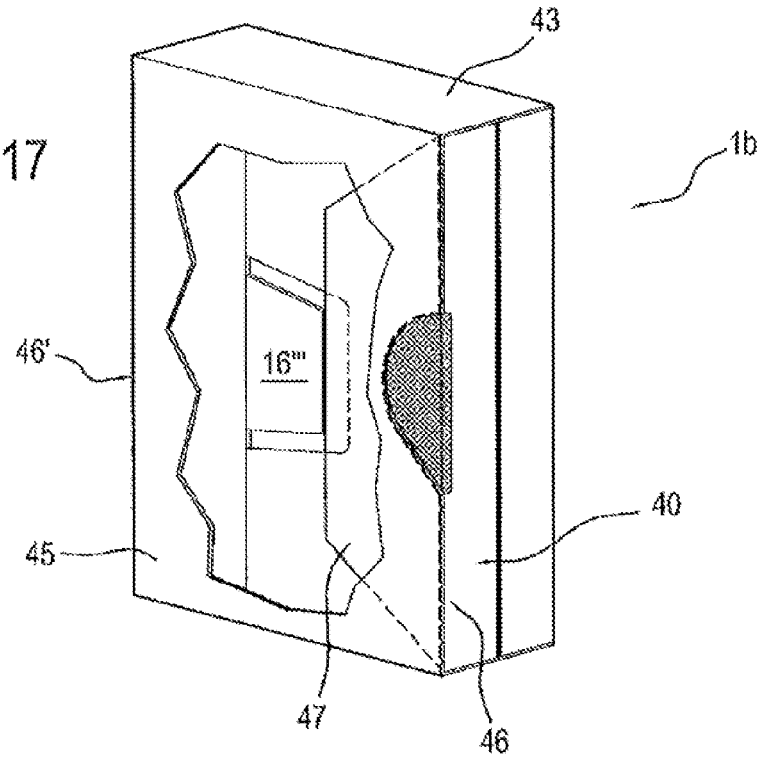

43
1b
46'
16'''
40
45
47
46

FIG.18

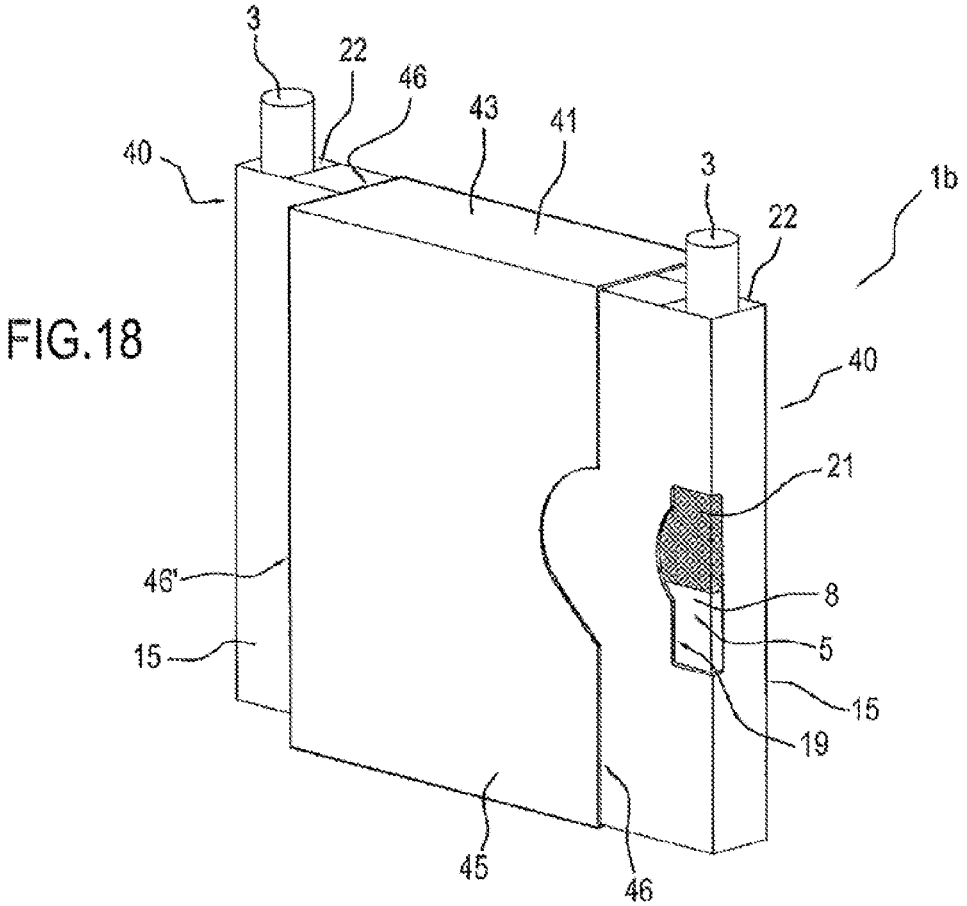

3
22
46
43
41
40
3
1b
22
40
21
46'
8
15
5
15
19
45
46

FIG.19

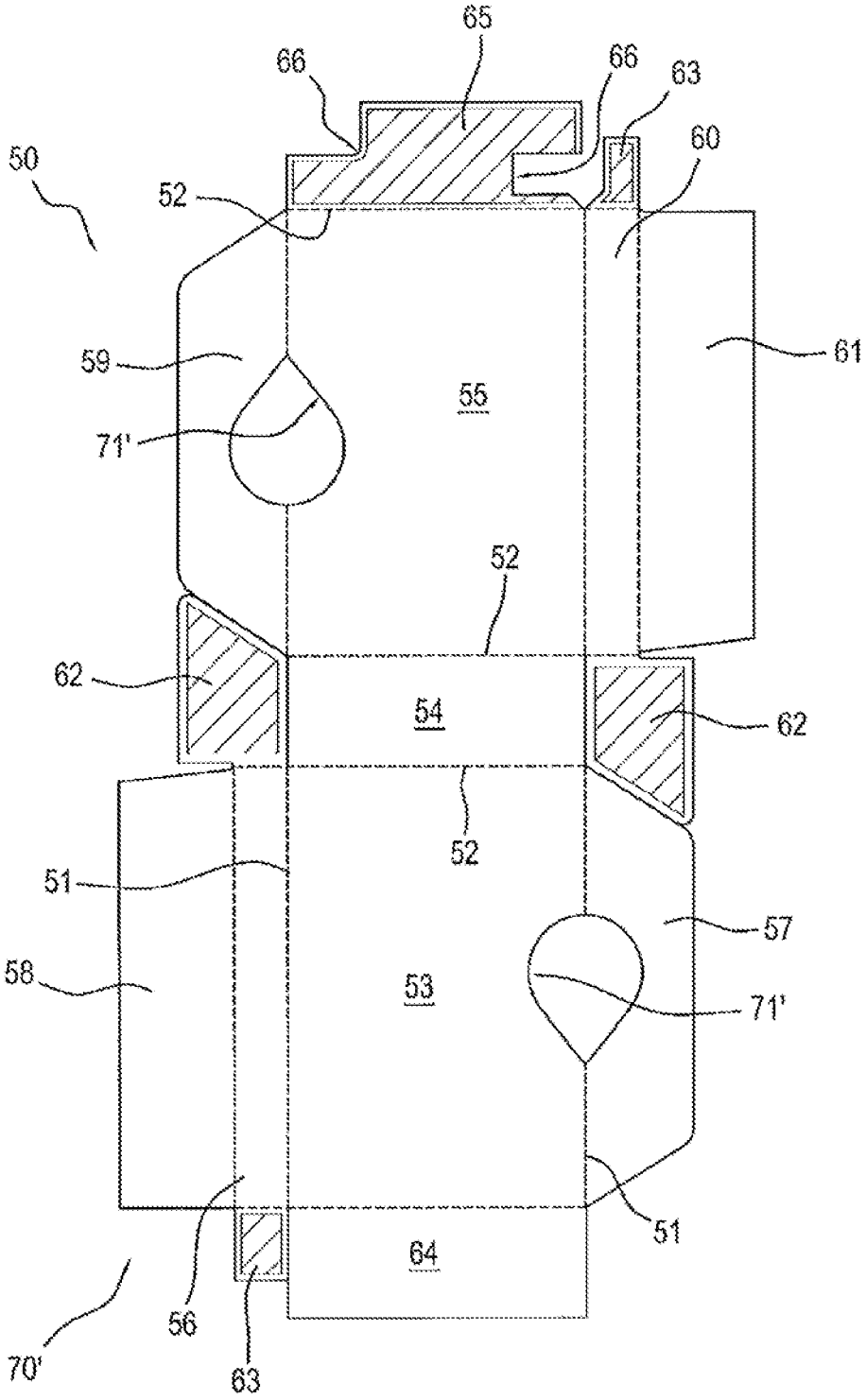

65
66
66
63
60
50
52
59
61
55
71'
52
62
54
62
52
51
57
58
53
71'
51
64
56
70'
63

FIG.20

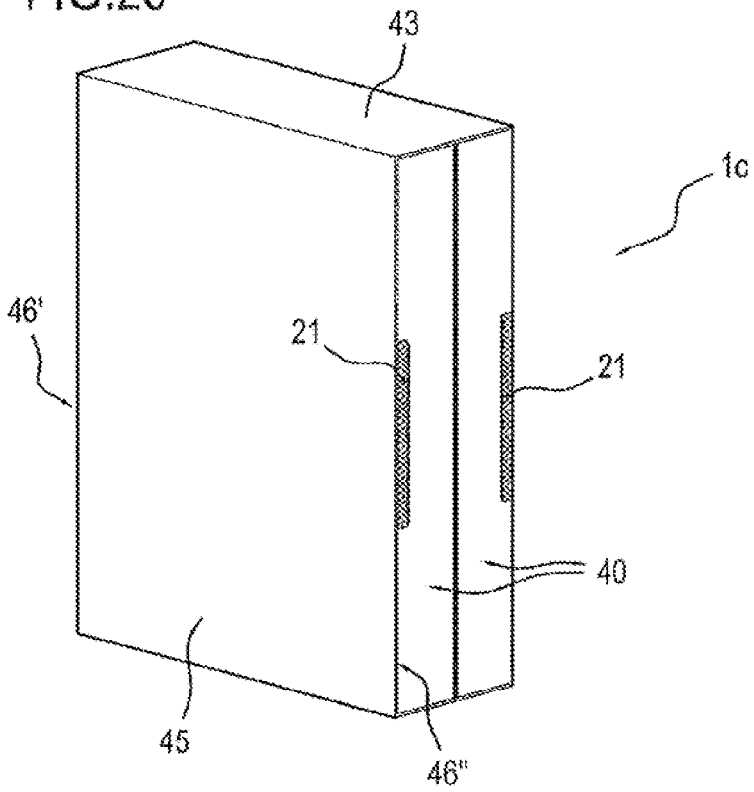


FIG.21

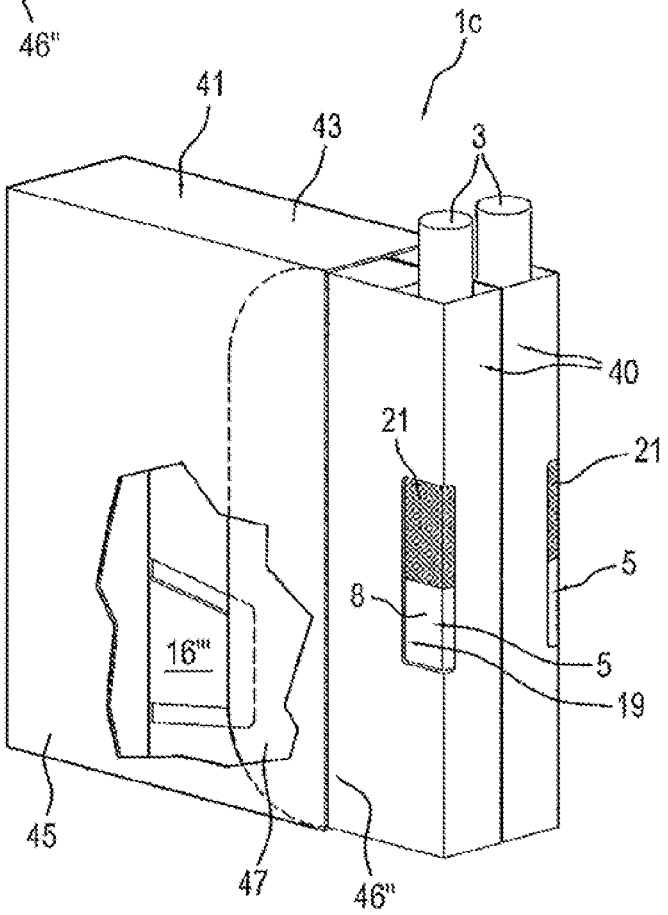


FIG.22

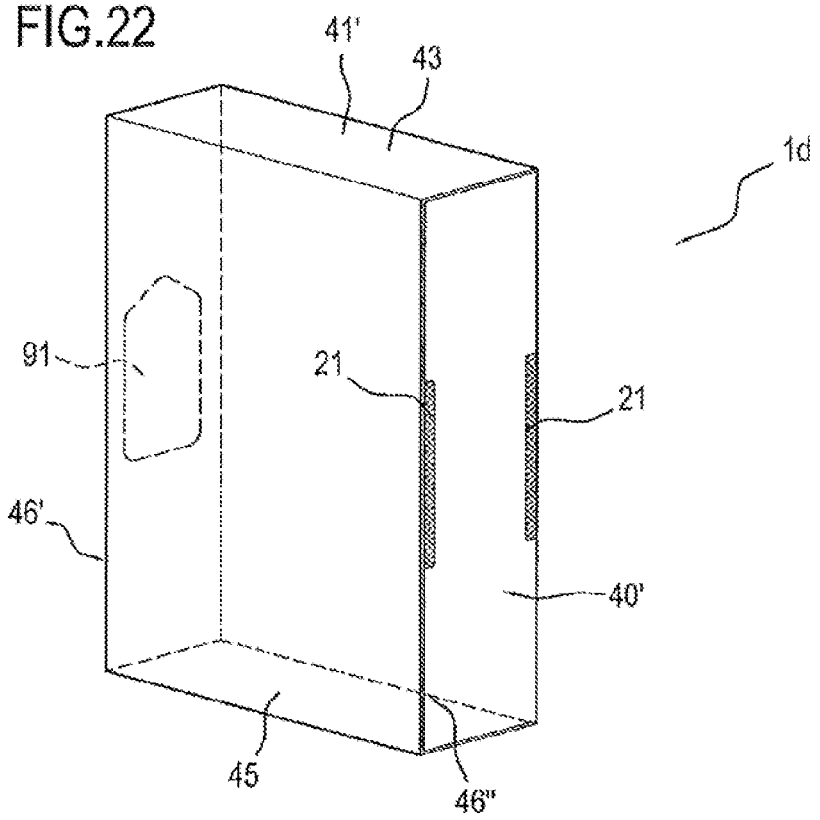

41'
43
1d
91
21
21
46'
40'
45
46"

FIG.23

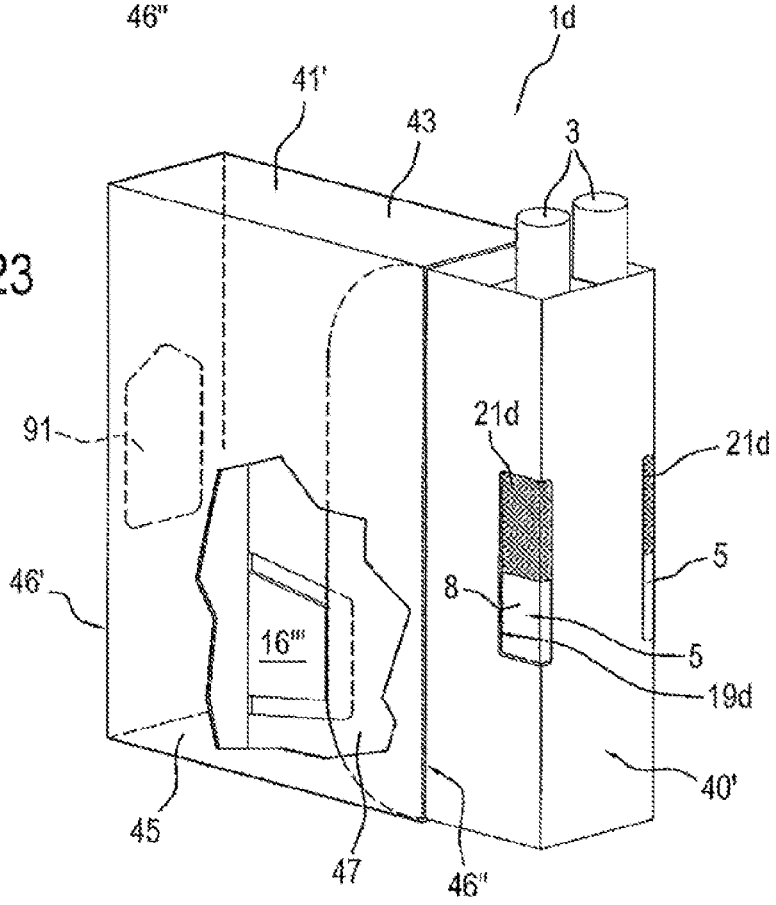

1d
41'
43
3
91
21d
21d
5
46'
8
5
16'''
19d
40'
45
47
46"

FIG.24

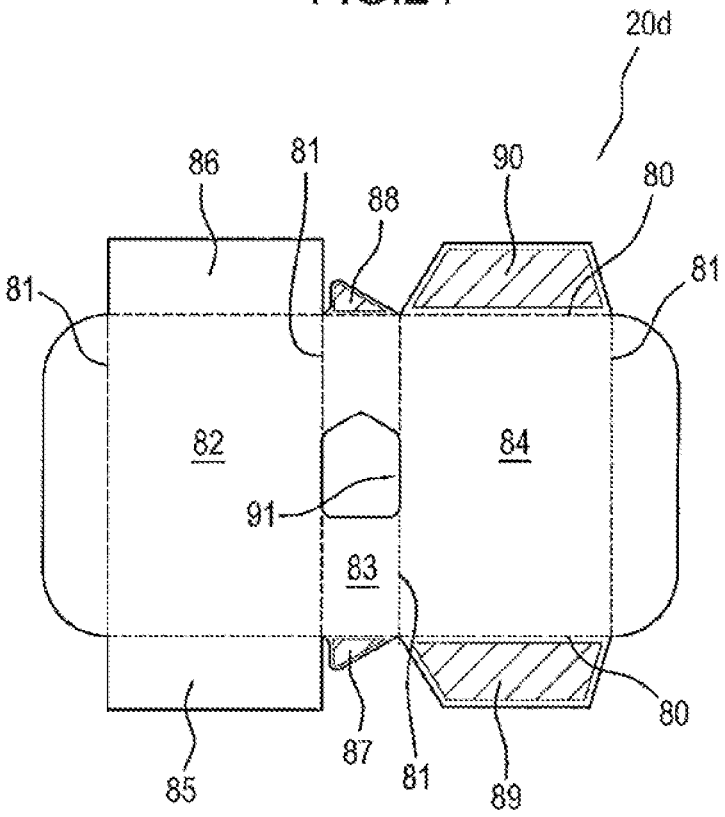
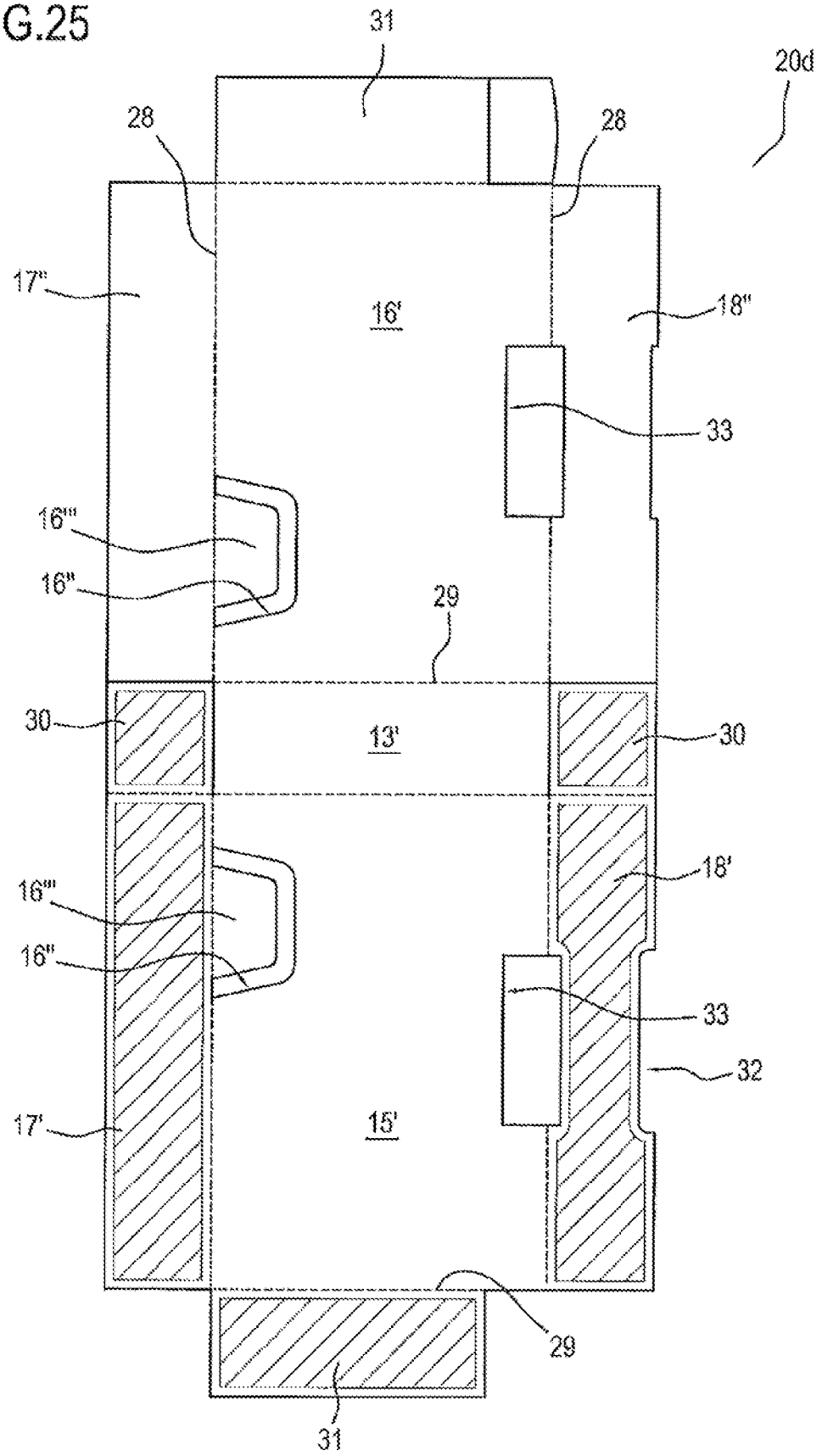


FIG.25



PACKET FOR TOBACCO PRODUCTS

This application is the National Phase of International Application PCT/IB2013/051708 filed Mar. 4, 2013 which designated the U.S. and that International Application was published under PCT Article 21(2) in English.

This application claims priority to Italian Patent Application No. BO2012A000112 filed Mar. 7, 2012, which application is incorporated by reference herein.

TECHNICAL FIELD

This invention relates to a packet for tobacco products with facilitated extraction of the tobacco products.

Hereinafter in this description, reference is made to tobacco products consisting of cigarettes, without thereby restricting the scope of the invention.

BACKGROUND ART

Several types of cigarette packets present on the market have an outer container which slidably houses an inner container which accommodates a group of cigarettes.

The inner container can slide inside the outer container between a closed position in which the inner container is completely inserted in the outer container, and an open position, in which the inner container is partly extracted from the outer container.

Some embodiments of hard cigarette packets which slide open by a translating movement are described in patent documents FR2499947A1, U.S. Pat. No. 4,534,463A1, U.S. Pat. No. 5,080,227A1 and IT116916 B.

Often, the inner container applies a certain amount of lateral compression on the group of cigarettes inside it. When the cigarette packet is new and the group of cigarettes it contains is whole, the lateral compression applied to the group of cigarettes may be relatively high and may make it quite difficult to take out the first cigarette from the group of cigarettes owing to the friction between the first cigarette itself and the cigarettes around it.

One solution which has been proposed to make it easier to take out the first cigarette, and if necessary also other cigarettes, from the group, is to couple to at least one cigarette in the group a pull-out tape with one end which protrudes from the top wall of the group of cigarettes and which is designed to be gripped and pulled in order to lift out the cigarette.

These pull-out tapes, however, usually require the inner end of them, opposite the end to be gripped, to be glued to one wall of the inner container. This constitutes a major disadvantage since the inner wrappings of cigarette packets have always been left free of glue because glue in contact with or close to the cigarettes may give off volatile substances which are absorbed by the cigarettes and cause an unwanted alteration of the flavour and/or taste of the cigarette tobacco.

DISCLOSURE OF THE INVENTION

This invention has for an aim to provide a packet for tobacco products with facilitated extraction of the tobacco products and which overcomes the above mentioned disadvantages.

The invention accordingly provides a packet for tobacco products with facilitated extraction of the tobacco products as described in the appended claims.

BRIEF DESCRIPTION OF DRAWINGS

The invention is described below with reference to the accompanying drawings, which illustrate a non-limiting embodiment of it, and in which:

FIGS. **1** and **2** are perspective views of a packet for tobacco products according to this invention, in two different working situations;

FIG. **3** is a perspective view of a box-shaped body forming part of the packet of FIGS. **1** and **2**, in the closed condition;

FIG. **3***a* shows a schematic transverse cross section of the box-shaped body of FIG. **3**;

FIGS. **4** and **5** are perspective views of a mobile container forming part of the packet for tobacco products of FIGS. **1** and **2**, in two different working situations;

FIGS. **6** and **7** are perspective views of two containers, respectively inner and outer, forming part of the mobile container of FIGS. **4** and **5**;

FIGS. **8** and **9** are plan views showing two blanks used to make the containers of FIGS. **6** and **7**, respectively;

FIG. **10** is a plan view of a blank used to make the box-shaped body of FIG. **3**;

FIG. **11** is a perspective view of a variant embodiment of a part of the packet of the preceding figures;

FIG. **12** is a perspective view of a further variant embodiment of a part of the packet of the preceding figures;

FIG. **13** is a plan view of a blank used to make the variant embodiment of FIG. **12**;

FIGS. **14** and **15** are perspective views of a variant embodiment of the packet for tobacco products of FIGS. **1** and **2**, in two respective different working situations;

FIG. **16** is a plan view of a blank used to make a box-shaped body of the packet of FIGS. **14** and **15**;

FIGS. **17** and **18** are perspective views of a further variant embodiment of the packet for tobacco products of FIGS. **1** and **2**, in two respective different working situations;

FIG. **19** is a plan view of a blank used to make a box-shaped body of the packet of FIGS. **17** and **18**;

FIGS. **20** and **21** are perspective views of a further variant embodiment of the packet for tobacco products of FIGS. **1** and **2**, in two respective different working situations;

FIGS. **22** and **23** are perspective views of another variant embodiment of the packet for tobacco products of FIGS. **1** and **2**, in two respective different working situations;

FIG. **24** is a plan view of a blank used to make box-shaped body of the packet of FIGS. **22** and **23**; and

FIG. **25** is a plan view of a further blank used to make the packet of FIGS. **22** and **23**.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS OF THE INVENTION

The numeral **1** in FIGS. **1** and **2** denotes in its entirety a packet for tobacco products, in particular cigarettes, and consisting of a hard packet of the slide-open type.

Hereinafter in this description, reference is made to tobacco products consisting of cigarettes, without thereby restricting the scope of the invention.

The packet **1** comprises a pair of mobile containers **40**, each of which receives a group **2** of cigarettes **3** (see also FIG. **6**), and an outer box-shaped body **41**, which slidably houses the containers **40** whose respective larger side walls **15** are positioned side by side; in such a way that each container **40** can slide relative to the box-shaped body **41** between a closed position (illustrated in FIG. **1**), where the containers **40** are completely inserted in the box-shaped body **41** and an open position (illustrated in FIG. **2**), in which a part of the mobile containers **40** is extracted from the box-shaped body **41**. As shown in FIG. **2**, the mobile containers **40** are able to slide out of the box-shaped body **41**, in respective opposite directions parallel with each other, through respective side portions of the box-shaped body **41** which are opposite one another.

It is important to observe that the two mobile containers **40** slide relative to the box-shaped body **41** independently of each other and it is therefore possible that only one of the containers **40** is in the open position or that both of the containers **40** are in the open position (as illustrated in FIG. **2**).

In the description which follows, the term "vertical" (or similar terms) will be used, for explanatory purposes, to describe the position adopted by the packet **1** when the cigarettes **3** inside it, for easier extraction, are positioned with their axes vertical and the zones where the cigarettes **3** themselves are extracted from the packet **1** are located at the top of the packet **1**. Similarly, the terms "upper" and "lower" (and like terms, such as "top" and "bottom") will be used to designate the corresponding portions of the packet **1** when is in the vertical position.

As illustrated, in particular in FIG. **3**, the box-shaped body **41** has the shape of a parallelepiped and has a bottom wall **42** at its lower end, a top wall **43** at its upper end, a lateral surface **44** which is delimited above and below by its bottom and top walls **42** and **43**, respectively. The lateral surface **44** is also defined by two larger side walls **45** which are positioned vertically, opposite and parallel to each other, and which are joined to each other, above and below, by the bottom and top walls **42** and **43**.

Two horizontally opposite portions of the box-shaped body **41** are defined by corresponding openings **46**, extending preferably (and as shown in FIGS. **1-3**) right across the respective smaller lateral faces **46'** of the box-shaped body **41**. The openings **46** are designed to allow the mobile containers **40** to move between the aforementioned positions where they are closed (FIG. **1**) and open (FIG. **2**).

As shown in FIGS. **4-7**, in the context of each mobile container **40**, the group **2** of cigarettes **3** is contained in a hard inner container **5** which is housed in such a way that it can slide within a hard outer container **6**, made of cardboard or the like, vertically in both directions with a straight vertical movement between a retracted position (illustrated in FIG. **4**), where the inner container **5** is at its lowermost position inside the outer container **6** and a raised or cigarette extraction position (illustrated in FIG. **5**), where the inner container **5** is at its uppermost position inside the outer container **6** and keeps one cigarette **3** in a partly extracted position (upwardly) from the inner container **5**.

Integral with a vertical portion substantially half way along the edge of each outer container **6** and situated, in the context of the packet **1** in the closed condition, substantially at the centre of the opening **46** and adjacent to the other outer container **6** there is a grip element comprising a wing **6'** which projects outwards from the body of the packet **1** so that, in use, it can be gripped and pulled manually in order to extract the respective container **6** partly from the box-shaped body **41**.

The inner container **5** (FIG. **6**) has the shape of a parallelepiped, with a substantially "cupped" form, and has a bottom wall **7**, two parallel larger side walls **8**, which are parallel and opposite to one another, and two smaller parallel side walls **9** and **10**, which are interposed between the larger side walls **8**. The open upper end **11** of the inner container **5** defines, in the proximity of the smaller side wall **10**, a zone **12** for extracting one cigarette **3** at a time and through which, when the inner container **5** is in the "raised" position (whose features and purposes are described below) it is possible to extract a cigarette **3** from the packet **1**.

As illustrated, in particular in FIG. **7**, the outer container **6** also has the shape of a parallelepiped and has a bottom wall **13** at its lower end, a top wall **14** at its upper end, two larger side walls **16** and **16** which are parallel and opposite to each other and which are located, in FIG. **7**, at the front and back, respectively, and two smaller side walls **17** and **18** (which are positioned on the left and on the right, respectively).

In a zone substantially half way along the edge where the side walls **15** and **18** of the outer container **6** meet, there is an opening comprising a slot **19** made in the blank **20** which makes up the outer container **6** itself and through which a smoker can touch a front zone **21** of the inner container **5**. The shape and size of the slot **19** are such as to allow the smoker to apply, through the slot **19** itself, a pushing action on the front zone **21** of the inner container **5** in such a way as to move it vertically in both directions, making it slide within the outer container **6** between the aforementioned retracted and raised positions. It should be noted that in variant embodiments, not illustrated, of the packet **1**, the slot **19** might be made in only one of the larger side walls **15** (preferably the front one), or one of the smaller side walls **18**.

In order to facilitate the manual pushing action applied by the smoker on the front zone **21** of the inner container **5**, the exposed surface of the front zone **21** may be provided with knurling or other roughening feature.

The upper wall **14** of the outer container **6** has an opening **22** which is substantially square in shape, vertically aligned with the zone **12** for extracting the cigarettes **3** and therefore placed substantially over a lateral end portion of the inner container **5** on the right-hand side in FIGS. **1** and **2** and facing the slot **19** of the outer container **6**.

The packet **1** is provided with stop means which are designed to limit the sliding of the mobile containers **40** relative to the box-shaped body **41** in such a way as to prevent the selfsame mobile containers **40** from being pulled out of the box-shaped body **41** completely. The stop means are defined, as regards the box-shaped body **41**, by two substantially trapezoidal tabs **47** which project from the larger side walls **45** of the box-shaped body **41** towards the inside of the box-shaped body **41** itself and which are located close to respective opposite openings **46** of the box-shaped body **41**. More specifically, as shown in particular in FIG. **3**, when the packet **1** is closed, each tab **47** abuts one wall **15** of a mobile container **40** substantially at the zone of the selfsame wall **15** that comes out of the box-shaped body **41** when the mobile container **40** is partly extracted from the box-shaped body **41** itself. Also, preferably, each tab **47** is glued to the adjacent larger side wall **45** of the box-shaped body **41**.

The stop means are defined, as regards each mobile container **40**, by a substantially trapezoidal tab **16"** which projects outwards from a respective larger side wall **15** of the mobile container **40** and which is positioned to face a larger side wall **45** of the box-shaped body **41**. As shown also in FIG. **9**, the tab **16'"** forms part of the respective larger side wall **15** of the outer container **6** (and hence of the mobile container **40**) and is defined by an incision **16"** cut through the larger side wall **15**.

As shown in FIG. **3**, the tab **16'"** of each mobile container **40** is positioned in such a way that its vertical edge **48** comes into contact with a corresponding vertical edge **49** of the corresponding tab **47** of the box-shaped body **41** when the mobile container **40** is slid out of the box-shaped body **41** and thus prevents the mobile container **40** from coming out of the box-shaped body **41**.

On the other hand, if the tabs **47** are not glued to the adjacent larger side walls **45** of the box-shaped body **41**, the mobile container **40** is prevented from coming out of the box-shaped body **41** by the fact that the respective tab inserted into the space between the tab **47** adjacent to it and the larger side wall **45** of the box-shaped body **41** alongside the tab **47**.

The containers **5** and **6** of each mobile container **40** of the cigarette packet **1** are obtained from corresponding blanks **23** and **20**, respectively, illustrated in FIGS. **8** and **9**, respectively. Each of the blanks **23** and **20** comprises a plurality of elements, which, where possible, are denoted by primed reference numerals which are the same as the unprimed reference numerals denoting the corresponding elements of the respective container **5** or **6**.

With reference to FIG. **8**, the blank **23** has two longitudinal lines of weakness **24** and two transversal lines of weakness **25** which define (from the bottom up in the figure), between the two longitudinal lines of weakness **24**, a panel **8'** constituting one larger side wall **8**, a panel T constituting the bottom wall **7** and a panel **8'** constituting the other larger side wall **8**.

The panel **8"**, located at the bottom in FIG. **5**, has a pair of side flaps **9'**, **10'**, left and right, respectively, which constitute an inner part of the smaller side walls **9**, **10'**, are located on opposite sides of the panel **8'** adjacent to them and are separated from the panel **8'** by the longitudinal lines of weakness **24**. Similarly, the panel **8'**, located at the top in FIG. **8**, has a pair of side flaps **9"**, **10"**, left and right, respectively, which constitute an outer part of the smaller side walls **9**, **10'**, are located on opposite sides of the panel **8'** adjacent to them and are separated from the panel **8'** by the longitudinal lines of weakness **24**.

The panel **7'** constituting the bottom wall **7**, is provided, on the part of it on the left in FIG. **8**, with a line of weakness **26** which is substantially in the shape of a "U" with concavity facing towards the left and having two opposite long sides **27** coinciding with respective portions of the two longitudinal lines of weakness **25** which delimit two opposite sides of the panel **7'** itself.

The line of weakness **26** extends towards the right of the panel **7'** to a distance from that end which is just a little longer than the diameter of a cigarette **3**. The portion of the panel **7'** between the right-hand end of the panel **7'** itself and the line of weakness **26** will hereinafter be referred to as "supporting portion", denoted by the reference numeral **26'**.

With reference to FIG. **9**, the blank **20** has two longitudinal lines of weakness **28** and a plurality of transversal lines of weakness **29** which define (from the bottom up in the figure), between the two longitudinal lines of weakness **29**, a panel **15'** constituting one larger side wall **15**, a panel **13'** constituting the bottom wall **13** and a panel **16'** constituting the other larger side wall **16**.

The panel **15'** has a pair of side flaps **17'** and **18'**, left and right, respectively, in FIG. **9**, which are located on opposite sides of the panel **15'** itself, are separated from the panel **15'** by the longitudinal lines of weakness **28**, are substantially rectangular in shape and constitute an outer portion of the walls **17** and **18**, respectively. Similarly, the panel **16'** has a pair of side flaps **17"** and **18"**, left and right, respectively, in FIG. **9**, which are located on opposite sides of the panel **16'**, are separated from the panel **16'** itself by the longitudinal lines of weakness **28**, are substantially rectangular in shape and constitute an inner portion of the walls **17** and **18**, respectively. Integral with a substantially median portion of one vertical side of the flap **18"** on the right in FIG. **9** there is a substantially trapezoidal wing **6'** which projects towards the outside of the blank **20**.

In a vertically median portion of the panel **16'** bordering on the flap **17"** there is an incision **16"** which substantially follows the shape of the smaller base and sides of an isosceles trapezium whose larger base coincides with a portion of the longitudinal line **28** which separates the panel **16'** itself from the flap **17"**. The portion of the blank **20** enclosed within the incision **16"** defines the substantially trapezoidal tab **16'"** of the mobile container **40**.

The horizontal sides of the side flaps **17'** and **18'** located at the top in FIG. **9** are connected, by end portions of the transversal line of weakness **29** which separates the panel **13'** from the panel **15'**, to two flaps **30** extending towards, and almost touching, the flaps **17"** and **18"**, respectively. Each of the panels **15'** and **16'** has a horizontal side, located respectively at the bottom and top in FIG. **9**, and connected to a respective flap **31** located on the opposite side with respect to the panel **13'** and separated from the respective panel **15'**, **16'** by a transversal line of weakness **29**.

The transversal dimension of the flaps **31** in the direction of the transversal lines of weakness **29** is smaller than the transversal dimension of the panels **15'** and **16'**, and the flaps **31** are positioned relative to the respective panels **15'** and **16'** in such a way that they are clear of respective lateral portions of the panels **15'** and **16'** situated on the right in FIG. **9** and whose width is just larger than the diameter of a cigarette **3**.

The side flap **18'** connected to the edge of the panel **15'** situated on the right in FIG. **9** is provided, at a longitudinally median zone of it, with a recess **32** which runs parallel to the longitudinal direction of extension of the blank **20** and whose depth is substantially equal to half the width of the flap **18'** itself.

The zone of connection between the panel **16'** and the side flap **18"** situated on the right in FIG. **9** is crossed at a longitudinally median part of it, by a substantially rectangular elongate slot **33** which runs parallel to the longitudinal direction of extension of the blank **20**, whose length is substantially equal to that of the recess **32** and whose width, at the portion of it corresponding to the side flap **18"**, is equal to that of the recess **32**, whilst at the portion of it situated on the panel **16'** is preferably greater than the width of the recess **32**, being substantially equal to 7-10 mm.

It should be noted that in variant embodiments of the invention not illustrated, the slot **33** might be situated at any position in the right-hand zone of the panel **16'**, and it might be of any shape and size, in any case different from the shape and size of the slot **33** shown in FIG. **9**.

With reference to FIG. **10**, the blank **50** from which the box-shaped body **41** is obtained has two longitudinal lines of weakness **51** and a plurality of transversal lines of weakness **52** which define (from the bottom up in the figure), between the two longitudinal lines of weakness **51**, a panel **53** constituting one larger side wall **45** of the box-shaped body **41**, a panel **54** constituting the bottom wall **42** and a panel **55** constituting the other larger side wall **45**.

The panel **53** has a pair of side flaps **56** and **57**, left and right, respectively, in FIG. **10**, which are located on opposite sides of the panel **53** itself, are separated from the panel **53** by the longitudinal lines of weakness **51**, and have, respectively, a substantially rectangular shape (the flap **56**) and the shape of an isosceles trapezium (the flap **57**). The flap **57** constitutes one of the aforementioned tabs **47**. Integral with the flap **56** situated on the left in FIG. **10** is the right-hand longitudinal side of a substantially rectangular wall **58**.

Similarly, the panel **55** has a pair of side flaps **59** and **60**, left and right, respectively, in FIG. **10**, which are located on opposite sides of the panel **55**, are separated from the panel **55** itself by the longitudinal lines of weakness **51**, and have, respectively, a substantially rectangular shape (the flap **59**) and the shape of an isosceles trapezium (the flap **60**). The flap **59** constitutes one of the aforementioned tabs **47**, integral with the flap **60** situated on the right in FIG. **10** is the left-hand longitudinal side of a substantially rectangular wall **61**.

The horizontal sides of the side flaps **56** and **60** located, respectively, at the top and bottom in FIG. **10** are connected, respectively, by end portions of respective transversal line of weakness **52**, to two flaps **62** extending towards, and almost touching, the flaps **59** and **57**, respectively.

The horizontal sides of the side flaps **56** and **60** located, respectively, at the bottom and top in FIG. **10** are connected, respectively, by end portions of respective transversal line of weakness **52**, to two flaps **63** extending downwards and upwards, respectively.

Each of the panels **53** and **55** has a horizontal side, located respectively at the bottom and top in FIG. **10**, and connected to a respective flap **64**, **65** located on the opposite side with respect to the panel **54** and separated from the respective panel **53**, **55** by a transversal line of weakness **52**. The transversal dimension of the flaps **64** and **65** in the direction of the transversal lines of weakness **52** is equal to the transversal dimension of the panels **53** and **56**. The flap **65** located at the top in FIG. **10** has two indentations **66** whose function, when the box-shaped body **41** is assembled, is to receive the flaps **63** in such a way that the flaps **63** themselves do not overlap portions of the flaps **64** and **65**.

In the blanks **23**, **20** and **50** shown in FIGS. **8**, **9** and **10**, the parts where glue must be applied in order to assemble the containers **5** and **6** and the box shaped body **41** are represented as hatched areas.

The inner container **5** is assembled by folding the panels **8** squarely relative to the panel **7'**, towards each other, about the transversal lines of weakness **25** which join them to the panel **7'** itself. The side flaps **9'** and **10'** are then folded squarely about the longitudinal lines of weakness **24** which join them to the panel **8'**, in such a way that they cover the space between the two panels **8'**, and the side flaps **9"** and **10"** are in turn folded squarely over the respective side flaps **9'** and **10'** which have already been folded. The glue on the blank **23**, as specified above, keeps the inner container **5** in the shape thus obtained.

The outer container **6** is assembled in a similar way to the inner container **5**, since the panels **15'** and **16'** are folded squarely about the transversal lines of weakness **29** which join them to the panel **13'**, the side flaps **17"** and **18"** are folded squarely about the longitudinal lines of weakness **28**, which join them to the panel **16'**, in such a way that they cover the space between the two panels **16'**, the flaps **30** are folded squarely about the transversal lines of weakness **29**, which join them to the respective flaps **17'** and **18**, and are placed over the panel **13'**, and the side flaps **17'** and **18'** are folded squarely over the respective side flaps **17"** and **18"** which have already been folded. These operations are performed by shaping the outer container **6** around the inner container **5** already erected and housing inside it a row **4** of cigarettes **3** When the outer container **6** has been completed, the flaps **31** are folded squarely over each other in such a way as to close the outer container **6**. The glue on the blank **20**, as specified above, keeps the outer container **6** in the shape thus obtained.

It should be noted that on the face of it which is on the outside of the inner container **5**, the portion of the panel **7'** of the inner container **5** enclosed within the line of weakness **26** is provided with glue which, after the containers **5** and **6** have been assembled, causes it to adhere to the panel **13'** of the outer container **6**.

As a result, the blank **23** is easy to handle while the inner container being made, since its bottom panel T' connects the panels **8'** to each other for as long as the line of weakness **26** remains intact, thus giving the blank **23** good shape stability and sufficient rigidity. Once the packet **1** has been completed, the first time an inner container **5** is made to slide upwards within the respective outer container **6**, as mentioned above and as will be explained in more detail below, the line of weakness **26** is torn, the inner container **5** comes completely free of the outer container **6** and the walls **8** of the inner container **5** remain connected to each other only by the zone of the panel **7'** outside of the line of weakness **26**. From this moment on, the inner container **5** is open at the bottom except only the zone of the panel T outside the line of weakness **26**, that is to say, except the supporting portion **26'** of the wall **7**.

In other words, according to the above, the bottom wall of the inner container **5** is defined by a bottom wall **7** in which a tearable line of weakness **26** is made which delimits an area of the selfsame bottom wall **7**. A portion of the bottom wall **7** outside that area defines the supporting portion **26'** and the area is connected by adhesive to the bottom wall **13** of the outer container **6**.

To assemble the box-shaped body **41**, the flaps **62** and **63** are folded squarely about the transversal lines of weakness **52** which join them to the flaps **56** and **60**. The side flaps **56** and **57** are folded—the former squarely and the latter by 180°—about the longitudinal lines of weakness **51** which join them to the panel **53**, and the side flaps **59** and **60** are folded—the former by 180° and the latter squarely—about the longitudinal lines of weakness **51** which join them to the panel **55**. The walls **58** and **61** are then folded squarely about the lines of weakness which join them to the flaps **56** and **60**, respectively. The panels **53** and **55** are folded squarely about the transversal lines of weakness **52** which join them to the panel **54** constituting the bottom wall **42** of the box-shaped body **41**, and at the same time, the flaps **62** are placed over respective portions of the panel **54** inside the box-shaped body **41** itself. To complete the box-shaped body **41**, the flap **65** is folded squarely about the transversal line **52** which connects it to the panel **55**, and the flap **64** is folded squarely about the transversal line **52** which connects it to the panel **53** and is placed over the flap **65** and over the flaps **63**.

The final arrangement of the panels **53** and **55**, of the flaps **56**, **57**, **59** and **60** and of the walls **58** and **61** in the box-shaped body **41** is clearly shown in FIG. **3***a*, which also shows the mobile containers **40** housed in the box-shaped body **41**.

The glue on the blank **50**, as specified above, keeps the box-shaped body **41** in the shape thus obtained.

In use, according to what is mentioned above, when cigarettes **3** do not need to be extracted from the packet **1**, the shape of the packet **1** is that shown in FIG. **1**, where the mobile containers **40** are contained wholly within the box-shaped body **41**.

To extract a cigarette **3**, it is necessary to take one of the mobile containers **40** partly out of the box-shaped body **41**, by making it slide relative to the box-shaped body **41** by manually pulling on the tab **6'** (FIG. **2**). As mentioned above, the mobile containers **40** are prevented from coming out of the box-shaped body **41** completely, or from coming out too far, by the action of the stop means comprising the aforementioned tabs **47** and **16'"**.

When a mobile container **40** has been slid partly out of the box-shaped body **41**, the respective inner container **5** occupies its lowermost retracted position where its bottom wall **7** is in contact with the bottom wall **13** of the outer container **6**. Owing to a prior arrangement of the packet **1** with the row **4** of cigarettes **3** lying in a substantially vertical plane and with the axes of the cigarettes **3** horizontal, the cigarettes **3** housed inside the inner container **5** have slid translationally towards the wall **10** of the inner container **5**, perpendicularly to their axes. As a result of this sliding, the cigarette **3** closest to the

wall **10** of the inner container **5** has moved above the zone of the wall **7** adjacent to the wall **10** itself, that is to say, above the supporting portion **26'**.

To take a cigarette **3** out of the packet **1**, all the smoker has to do is press a finger on the front zone **21** of the inner container **5** through the slot **19** of the outer container **6** in such a way as to urge the inner container **5** upwards from the retracted position to the raised position and to cause an upper portion of the cigarette **3** resting on the supporting portion **26'** of the wall **7** to protrude through the opening **22** of the top wall **14** of the outer container **6**.

As specified above, since the bottom of the inner container **5** is open except for the supporting portion **26'** of the wall **7**, the other cigarettes **3** in the row **4** remain in the lowered position in contact with the bottom wall **13** of the outer container **6**.

Once the cigarette **3** protruding partly from the packet **1** has been taken out, the inner container **5** must be returned to the initial retracted position by pressing a finger on the front zone **21** in order to allow another cigarette **3** to move onto the supporting portion **26'** of the wall **7**, as described above.

After a cigarette has been extracted in the manner described, the mobile container **40** from which the cigarette **3** has been removed is pushed back manually into the box-shaped body **41** and returns to the initial position shown in FIG. **1**.

In order to facilitate the sliding of the cigarettes **3** towards the wall **10** after a cigarette **3** has been taken out, and the return of the inner container **5** to the initial retracted position, it is possible to house inside the inner container **5** an elastic element **34** (FIG. **11**) comprising a spring made (for example) by zigzag folding a sheet consisting (for example) of paperboard or plastic material and capable of urging the cigarettes **3** inside the inner container **5** transversely towards the wall **10**, that is to say, towards the zone of action of the supporting portion **26'**.

FIG. **12** shows a further variant embodiment of the inner container **5**, where the sliding of the inner container **5** in both directions between the initial retracted position and the raised position is caused by pulling up or down a grip element comprising a tab **35** which, as shown also in FIG. **13**, is integral with a lateral edge of the flap **10'** of the blank **23** of the inner container **5** itself and which comes out of the outer container **6** through an opening comprising slit **36** made in the respective blank **20**.

FIGS. **14** and **15** show a packet **1***a* constituting a variant embodiment of the packet **1** of FIGS. **1** and **2**.

In the packet **1***a* the outer containers **6** do not have the wing **6'** which projects outwards from the body of the packet so that it can be gripped and pulled manually in order to extract the containers **6** partly from the box-shaped body **41**.

In order to allow the manual action which causes the mobile containers **40** to be partly pulled out of the box-shaped body **41**, the longitudinally median zones of the larger side walls **45** of the box-shaped body **41** are provided, in the proximity of the smaller lateral faces **46'** adjacent to them, with respective removable portions **67** defined by respective tearable lines of weakness **68** (in the blank **50'** shown in FIG. **16** the removable portions **67** are labelled **67'** and the lines of weakness **68'**. and, where possible, the reference labels of the parts of the blank **50'** are the same as those of the corresponding parts of the blank **50** of FIG. **10**) In order to make it easier to grip these removable portions **67** manually, the smaller lateral faces **46'** adjacent to them are provided with respective rectangular openings **69** (labelled **69'** in the blank **50'** shown in FIG. **16**), bordering on the removable portions **67** themselves. It should be noted that the removable portions **67** might be made on any of the side walls of the containers **40**, or on more than one side wall of the containers **40**.

In use, the mobile containers **40** may be made to slide towards the outside of the box-shaped body **41** by urging them with a finger through the openings **70** created in the panels **45** and in the lateral faces **46'** when the removable portions **67** are removed or folded.

FIGS. **17** and **18** show a packet **1***b* constituting a further variant embodiment of the packet **1** of FIGS. **1** and **2**.

In order to allow the manual action which causes the mobile containers **40** to be partly pulled out of the box-shaped body **41**, the longitudinally median zones of the larger side walls **45** and of the flaps **47** of the box-shaped body **41** are provided. In the proximity of the openings **46** respectively adjacent to them, with respective recesses **71** (having the shape of slots and labelled **71'** in the blank **70'** shown in FIG. **19**). Preferably, each recess **71** makes the slot **19** of the outer container **6** adjacent to it accessible in such a way that the smoker can place a finger on the outer container **6** through the recess **71** and the adjacent slot **19** in order to partly extract the respective mobile container **40** from the box-shaped body **41**. As a result, after the movement by which the mobile container **40** is extracted laterally from the box-shaped body, the smoker's finger is already at the slot **19**, and is ready to urge the inner container **5** towards the raised position so that a cigarette **3** can be taken out.

FIGS. **20** and **21** show a packet **1***c* constituting a further variant embodiment of the packet **1** of FIGS. **1** and **2**.

The packet **1***c* differs from the above described packets **1**, **1***a* and **1***b* in that the two mobile containers **40** can come out of the box-shaped body **41** through a single lateral opening **46"**, that is to say, each can slide both ways out of or into the box-shaped body **41** in the same direction as the other.

FIGS. **22** and **23** show a packet **1***d* constituting a further variant embodiment of the packet **1** of FIGS. **1** and **2**.

The packet **1***d* comprises a box-shaped body **41'** made in such a way as to contain a single mobile container **40'** twice as large as those described up to now and capable, in use, of sliding horizontally in both directions into and out of the box-shaped body **41'** through an opening **46"** in a smaller lateral face of the box-shaped body **41'** itself.

The mobile container **40'** houses two inner containers **5** of the type described with reference to FIG. **6**, placed side by side along respective larger side walls.

A zone substantially half way along each of the edges where the larger side walls **15***d* and the smaller side well **18***d* of the mobile container **40'** meet has an opening in it which comprises a slot **19***d* through which a smoker can touch a lateral zone **21***d* of the respective inner container **5** in order to urge it vertically in both directions between the retracted and raised positions. It should be noted that in variant embodiments, not illustrated, of the packet **1***d* the slot **19***d* might be made in only one of the larger side walls **15***d* (preferably the front one), or one of the smaller side walls **18***d*.

In order to facilitate the manual pushing action which can be applied by the smoker on the front zone **21***d* of the inner container **5**, the surface of the zone **21***d* may be provided with knurling or other roughening feature.

In a variant embodiment, not illustrated, of the packet **1***d*, the sliding of the inner containers **5** in both directions within the mobile container **40'** might be caused, in a manner similar to that of the inner container **5** of FIG. **12**, by manually pulling each inner container **5** up or down using a respective gripping element comprising a tab (not illustrated) which is the same as the aforementioned tab **35** associated with the inner container **5** and coming out of the mobile container **40'** through a slit similar to the aforementioned vertical slits **36**.

With reference to FIG. **24**, the blank **20***d* from which the box-shaped body **41'** of the packet **1***d* is obtained has two transversal lines of weakness **80** and a plurality of longitudinal lines of weakness **81** which define, between the two transversal lines of weakness **80**, a panel **82** constituting one larger side wall **15***d* of the packet **1***d*, a panel **83** constituting the smaller side wall **18***d* and a panel **84** constituting the other larger side wall **15***d*. The panel **82** has a pair of flaps **85** and **86**, which are located on opposite sides of the panel **82**, are separated from the panel **82** by the transversal lines of weakness **80**, and constitute an external portion of the bottom and top walls of the packet **1***d*; the panel **83** has a pair of flaps **87** and **88**, which are located on opposite sides of the panel **83**, are separated from the panel **83** by the transversal lines of weakness **80**, and constitute an internal portion of the bottom and top walls of the packet **1***d*; and the panel **84** has a pair of flaps **89** and **90**, which are located on opposite sides of the panel **84**, are separated from the panel **84** by the transversal lines of weakness **80**, and constitute an internal portion of the bottom and top walls of the packet **1***d*. The flaps **87** and **88** and the flaps **89** and **90** are shaped in such a way that they do not overlap when they are folded against the flaps **85** and **86** to form the top and bottom walls of the packet **1***d*.

Lastly, the panel **83** is provided, in a substantially median zone of it, with a hole **91** whose shape and size are such as to allow a user's finger to pass through it. The purpose of the hole **91** is to facilitate extracting the mobile container **40'** from the box-shaped body **41'** by allowing a user to apply a pushing action on the smaller side wall **18***d* of the mobile container **40'** facing the hole **91** when the packet **1***d* is in the closed position illustrated in FIG. **22**.

The blank **20***d*, shown in FIG. **25**, used to make the mobile container **40'** of the packet **1***d* is similar to the blank **20** of FIG. **9**, where the reference numerals are the same as those of the blank **20***d*.

Unlike the blank **20**, the blank **20***d* has two elongate slots **33**, located at the longitudinally median parts of the zones of connection between the panel **16'** and the side flap **18"** and between the panel **15'** and the side flap **18'**. The blank **20***d* also has two incisions **16"**, defining respective substantially trapezoidal tabs **16'"** whose larger bases coincide, respectively, with a portion of the longitudinal line **28** which separates the panel **16'** from the flap **17** and with a portion of the longitudinal line **28** which separates the panel **16'** from the flap **17'**. Lastly, the blank **20***d* does not have the wing **6'**.

It will be understood that all the variant embodiments of the parts of the packets **1**, **1***a*, **1***b*, **1***c* and **1***d* described above, such as, for example, the gripping element **35** or the slot **19** are applicable to all of the packets **1**, **1***a*, **1***b*, **1***c* and **1***d* even where not expressly specified.

It should be noted that in each of the above described mobile containers **40**, **40'** the supporting portion **26'** and the extraction zone **12** might be of a size substantially equal to a multiple of the diameter of a cigarette **3**. In this case, the upward movement of the inner container **5** would cause the upper portions of two or more cigarettes **3** to come out through the zone **12**. After taking out one of these cigarettes **3**, the smoker would re-lower the inner container **5**, thereby causing the remaining, partly protruding cigarettes **3** to return into the outer container **6**.

The cigarettes **3** inside the inner containers **5** might also be arranged in two or more rows side by side, instead of in a single row **4**. In this case, too, the supporting portion **26'** might have two or more cigarettes **3** on it, side by side, the upward movement of the inner containers **5** would cause the upper portions of two or more cigarettes **3** to come out through the zone **12** and after taking out one of these cigarettes **3**, the smoker would re-lower the inner containers **5**, thereby causing the remaining, partly protruding cigarettes **3** to return into the outer container **6**.

The invention claimed is:

1. A packet for tobacco products with facilitated extraction of the tobacco products, comprising:

at least one mobile container for receiving the tobacco products, and

a box-shaped body, housing the at least one mobile container such that the mobile container can slide relative to the box-shaped body between a closed position, in which the at least one mobile container is completely inserted in the box-shaped body, and an open position, in which a part of the at least one mobile container is extended from the box-shaped body;

a stop for limiting sliding of the at least one mobile container relative to the box-shaped body to prevent separation of the at least one mobile container from the box-shaped body,

the at least one mobile container comprising:

an inner container substantially shaped as a parallelepiped, housing a group of elongate tobacco products which are positioned side by side in at least one row, each tobacco product comprising a pickup end portion which can be manually gripped and a second end portion opposite the pickup end portion, the inner container also comprising a bottom wall positioned at the second end portions of the tobacco products; and

an outer container shaped as a parallelepiped, housing the inner container slidably in parallel with axes of the tobacco products, thus allowing the inner container to slide between a retracted position, in which the inner container bottom wall is adjacent to a bottom wall of the outer container and all of the tobacco products are completely contained in the inner container, and an extended position, in which the inner container is positioned close to a top wall of the outer container;

the bottom wall of the inner container forming a supporting portion for abutting the second end portion of at least one of the tobacco products present in the inner container;

the top wall of the outer container comprising an opening; and

each sliding action of the inner container towards the extended position causing an axial movement towards the top wall of the outer container of the at least one tobacco product abutting the supporting portion and causing the pickup end portion of the at least one tobacco product abutting the supporting portion to extend out through the opening in the outer container.

2. The packet according to claim **1**, wherein the stop comprises at least a first tab, projecting from a respective larger side wall of the at least one mobile container towards an exterior of the at least one mobile container, and a second tab, projecting from a respective larger side wall of the box-shaped body towards an interior of the box-shaped body and positioned close to a corresponding opening in the box-shaped body; the first and second tabs being positioned such that the first tab couples with the second tab during extraction sliding of the at least one mobile container from the box-shaped body.

3. The packet according to claim **2**, wherein the first tab is located in a position such that one of its edges makes contact with a corresponding edge of the second tab of the box-shaped body during extraction sliding of the at least one mobile container from the box-shaped body.

4. The packet according to claim 1, and further comprising a pickup device associated with the at least one mobile container to allow a manual action which causes the at least one mobile container to partly come out of the box-shaped body.

5. The packet according to claim 4, wherein the pickup device comprises a wing integral with the at least one mobile container and projecting towards the exterior of the body of the packet.

6. The packet according to claim 1, wherein at least one side wall of the box-shaped body includes a portion which can be at least partly removed, defined by lines of weakness which can be torn, to allow a manual pulling action to cause the at least one mobile container to partly come out of the box-shaped body.

7. The packet according to claim 1, wherein a side wall of the box-shaped body includes a hole with shape and size such that it allows the passage of a finger of a user for applying a thrust on the at least one mobile container, for causing the at least one mobile container to partly come out of the box-shaped body.

8. The packet according to claim 1, wherein at least one side wall of the box-shaped body includes, close to an opening through which the at least one mobile container comes out of the box-shaped body, at least one recess to allow a user manual access to the at least one mobile container for partly extracting the at least one mobile container from the box-shaped body.

9. The packet according to claim 1, wherein the supporting portion of the inner container of the at least one mobile container has a width smaller than a width of the inner container, and a remaining portion of the bottom of the inner container, which can be occupied by the second end portions of the tobacco products of the group and positioned close to the supporting portion, is open and allows the tobacco products which do not abut the supporting portion to be positioned adjacent a bottom wall of the related outer container.

10. The packet according to claim 1, wherein the outer container of the at least one mobile container includes a further opening through which a user can manually act on the inner container to cause sliding actions of the inner container between the retracted position and the extended position.

11. The packet according to claim 10, wherein the inner container of the at least one mobile container comprises a grip element integral with the inner container and extending out of the outer container through the further opening.

12. The packet according to claim 11, wherein the grip element comprises a tab integral with the inner container; the further opening comprising a vertical slit made in the outer container.

13. The packet according to claim 1, wherein the inner container of the at least one mobile container houses an elastic element for pushing the tobacco products transversally towards the supporting portion.

14. The packet according to claim 1, wherein the box-shaped body houses two mobile containers, with larger side walls of the two mobile containers being positioned side by side; the two mobile containers able to slidingly extend out of the box-shaped body in respective opposite directions and parallel with each other, through respective side portions of the box-shaped body which are opposite one another.

15. The packet according to claim 1, wherein the box-shaped body houses two mobile containers, with larger side walls of the two mobile containers being positioned side by side; the two mobile containers able to slidingly extend out of the box-shaped body in a same direction, through a side portion of the box-shaped body.

16. The packet according to claim 1, wherein the box-shaped body houses the at least one mobile container which is able to partly extend out of the box-shaped body through a side portion of the box-shaped body.

17. The packet according to claim 1, wherein the supporting portion abuts only a single one of the tobacco products present in the inner container and each sliding action of the inner container towards the extended position causes an axial movement towards the top wall of the outer container of the single one of the tobacco products abutting the supporting portion and causes the pickup end portion of the single one of the tobacco products abutting the supporting portion to extend out through the opening in the outer container.

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